

two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.¹¹⁸ A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.¹¹⁹ A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.¹²⁰ The SBA has approved these small business size standards.¹²¹ A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.¹²² Three of these claimed status as a small or very small entity and won 311 licenses.

40. **Paging (Private and Common Carrier).** In the *Paging Third Report and Order*, we developed a small business size standard for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹²³ A “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA has approved these small business size standards.¹²⁴ According to Commission data, 291 carriers have reported that they are engaged in Paging or Messaging Service.¹²⁵ Of these, an estimated 289 have 1,500 or fewer employees, and two have more than 1,500 employees.¹²⁶ Consequently, the Commission estimates that the majority of paging providers are small entities that may be affected by our action. An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold. Fifty-seven companies claiming small business status won 440 licenses. A subsequent auction of MEA and Economic Area (“EA”) licenses was held in the year 2001. Of the 15,514 licenses auctioned, 5,323 were sold.¹²⁷ One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs, was held in 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.¹²⁸ A fourth auction of 9,603 lower and upper

¹¹⁸ *Amendment of the Commission's Rules to Establish New Personal Communications Services*, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, *Narrowband PCS, Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476, para. 40 (2000) (“*Narrowband PCS Second Report and Order*”).

¹¹⁹ *Narrowband PCS Second Report and Order*, 15 FCC Rcd at 10476, para. 40.

¹²⁰ *Id.*

¹²¹ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (*Alvarez Letter 1998*).

¹²² See “*Narrowband PCS Auction Closes*,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

¹²³ See *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PR Docket No. 93-253, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, 10085–88, paras. 98–107 (1999) (*Paging Third Report and Order*).

¹²⁴ See *Alvarez Letter 1998*.

¹²⁵ See *Trends in Telephone Service* at Table 5.3.

¹²⁶ See *id.*

¹²⁷ See “*Lower and Upper Paging Band Auction Closes*,” *Public Notice*, 16 FCC Rcd 21,821 (2002).

¹²⁸ See “*Lower and Upper Paging Bands Auction Closes*,” *Public Notice*, 18 FCC Rcd 11,154 (2003). The current number of small or very small business entities that hold wireless licenses may differ significantly from the number (continued...)

band paging licenses was held in the year 2010. Twenty-nine bidders claiming small or very small business status won 3,016 licenses.¹²⁹

41. **220 MHz Radio Service – Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to Wireless Telecommunications Carriers (except Satellite). Under this category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees.¹³⁰ The Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard that may be affected by rules adopted pursuant to the FNPRM.

42. **220 MHz Radio Service – Phase II Licensees.** The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹³¹ This small business size standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.¹³² A "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.¹³³ The SBA has approved these small business size standards.¹³⁴ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.¹³⁵ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.¹³⁶

43. **Specialized Mobile Radio.** The Commission awards small business bidding credits in auctions for Specialized Mobile Radio ("SMR") geographic area licenses in the 800 MHz and 900 MHz
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of such entities that won in spectrum auctions due to assignments and transfers of licenses in the secondary market over time. In addition, some of the same small business entities may have won licenses in more than one auction.

¹²⁹ See "Lower and Upper Paging Bands Auction Closes," Public Notice, 25 FCC Rcd 18,164 (2010).

¹³⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

¹³¹ See *Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, GN Docket No. 93-252, PP Docket No. 93-253, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295 (1997) (*220 MHz Third Report and Order*).

¹³² See *id.* at 11068-69, para. 291.

¹³³ See *id.* at 11068-70, paras. 291-95.

¹³⁴ See Letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998) (*Alvarez to Phythyon Letter 1998*).

¹³⁵ See *Phase II 220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (1998).

¹³⁶ See *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (1999).

bands to entities that had revenues of no more than \$15 million in each of the three previous calendar years.¹³⁷ The Commission awards very small business bidding credits to entities that had revenues of no more than \$3 million in each of the three previous calendar years.¹³⁸ The SBA has approved these small business size standards for the 800 MHz and 900 MHz SMR Services.¹³⁹ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction was completed in 1996.¹⁴⁰ Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band.¹⁴¹ The 800 MHz SMR auction for the upper 200 channels was conducted in 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.¹⁴² A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.¹⁴³

44. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels was conducted in 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard.¹⁴⁴ In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.¹⁴⁵ Of the 22 winning bidders, 19 claimed small business status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

45. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1500 or fewer employees.¹⁴⁶ We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.

46. **Broadband Radio Service and Educational Broadband Service.** Broadband Radio Service systems, previously referred to as Multipoint Distribution Service ("MDS") and Multichannel

¹³⁷ 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

¹³⁸ 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

¹³⁹ See Letter from Aida Alvarez, Administrator, SBA, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, FCC (Aug. 10, 1999) (*Alvarez Letter 1999*).

¹⁴⁰ "FCC Announces Winning Bidders in the Auction of 1,020 Licenses to Provide 900 MHz SMR in Major Trading Areas: Down Payments due April 22, 1996, FCC Form 600s due April 29, 1996," *Public Notice*, 11 FCC Rcd 18599 (WTB 1996).

¹⁴¹ *Id.*

¹⁴² See "Correction to Public Notice DA 96-586 'FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,'" *Public Notice*, 11 FCC Rcd 18,637 (WTB 1996).

¹⁴³ See "Multi-Radio Service Auction Closes," *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

¹⁴⁴ See "800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced," *Public Notice*, 15 FCC Rcd 17162 (WTB 2000).

¹⁴⁵ See "800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced," *Public Notice*, 16 FCC Rcd 1736 (WTB 2000).

¹⁴⁶ See generally 13 C.F.R. § 121.201, NAICS code 517210.

Multipoint Distribution Service (“MMDS”) systems, and “wireless cable,” transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (“BRS”) and Educational Broadband Service (“EBS”) (previously referred to as the Instructional Television Fixed Service (“ITFS”)).¹⁴⁷ In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than \$40 million in the previous three calendar years.¹⁴⁸ The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (“BTAs”). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, we estimate that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities.¹⁴⁹ After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission’s rules. The Commission has adopted three levels of bidding credits for BRS: (i) a bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) is eligible to receive a 15 percent discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed \$3 million and do not exceed \$15 million for the preceding three years (very small business) is eligible to receive a 25 percent discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years (entrepreneur) is eligible to receive a 35 percent discount on its winning bid.¹⁵⁰ In 2009, the Commission conducted Auction 86, which offered 78 BRS licenses.¹⁵¹ Auction 86 concluded with ten bidders winning 61 licenses.¹⁵² Of the ten, two bidders claimed small business status and won 4 licenses; one bidder claimed very small business status and won three licenses; and two bidders claimed entrepreneur status and won six licenses.

47. In addition, the SBA’s Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,032 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.¹⁵³

¹⁴⁷ *Amendment of Parts 21 and 74 of the Commission’s Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593 para. 7 (1995).

¹⁴⁸ 47 C.F.R. § 21.961(b)(1).

¹⁴⁹ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA’s small business size standard.

¹⁵⁰ 47 C.F.R. § 27.1218. *See also* “Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86,” Public Notice, 24 FCC Rcd 8277, 8296 (WTB 2009) (*Auction 86 Procedures Public Notice*).

¹⁵¹ *Auction 86 Procedures Public Notice*, 24 FCC Rcd at 8280.

¹⁵² “Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period,” Public Notice, 24 FCC Rcd 13572 (WTB 2009).

¹⁵³ The term “small entity” within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on EBS licensees.

Thus, we estimate that at least 1,932 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”¹⁵⁴ The SBA defines a small business size standard for this category as any such firms having 1,500 or fewer employees. The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.¹⁵⁵ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more.¹⁵⁶ Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the FNPRM.

48. **Lower 700 MHz Band Licenses.** The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.¹⁵⁷ The Commission defined a “small business” as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.¹⁵⁸ A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁵⁹ Additionally, the Lower 700 MHz Band had a third category of small business status for Metropolitan/Rural Service Area (“MSA/RSA”) licenses, identified as “entrepreneur” and defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.¹⁶⁰ The SBA approved these small size standards.¹⁶¹ The Commission conducted an auction in 2002 of 740 Lower 700 MHz Band licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)). Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders.¹⁶² Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.¹⁶³ The Commission conducted a second Lower 700 MHz Band auction in 2003 that included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses.¹⁶⁴ Seventeen winning bidders claimed small or very small business status and won 60 licenses,

¹⁵⁴ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition); <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

¹⁵⁵ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

¹⁵⁶ See *id.*

¹⁵⁷ See *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, GN Docket No. 01-74, Report and Order, 17 FCC Rcd 1022 (2002) (*Channels 52-59 Report and Order*).

¹⁵⁸ See *Channels 52-59 Report and Order*, 17 FCC Rcd at 1087-88 para. 172.

¹⁵⁹ See *id.*

¹⁶⁰ See *id.* at 1088 para. 173.

¹⁶¹ See *Alvarez Letter 1999*.

¹⁶² See “Lower 700 MHz Band Auction Closes,” Public Notice, 17 FCC Rcd 17272 (WTB 2002).

¹⁶³ *Id.*

¹⁶⁴ See “Lower 700 MHz Band Auction Closes,” Public Notice, 18 FCC Rcd 11873 (WTB 2003).

and nine winning bidders claimed entrepreneur status and won 154 licenses.¹⁶⁵ In 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz Band, designated Auction 60. There were three winning bidders for five licenses. All three winning bidders claimed small business status.¹⁶⁶

49. In 2007, the Commission reexamined its rules governing the 700 MHz band in the *700 MHz Second Report and Order*.¹⁶⁷ The *700 MHz Second Report and Order* revised the band plan for the commercial (including Guard Band) and public safety spectrum, adopted services rules, including stringent build-out requirements, an open platform requirement on the C Block, and a requirement on the D Block licensee to construct and operate a nationwide, interoperable wireless broadband network for public safety users.¹⁶⁸ An auction of A, B and E block licenses in the Lower 700 MHz band was held in 2008.¹⁶⁹ Twenty winning bidders claimed small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years). Thirty three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years). In 2011, the Commission conducted Auction 92, which offered 16 Lower 700 MHz band licenses that had been made available in Auction 73 but either remained unsold or were licenses on which a winning bidder defaulted. Two of the seven winning bidders in Auction 92 claimed very small business status, winning a total of four licenses.¹⁷⁰

50. **Upper 700 MHz Band Licenses.** In the *700 MHz Second Report and Order*, the

¹⁶⁵ See *id.*

¹⁶⁶ “Auction of Lower 700 MHz Band Licenses Closes, Winning Bidders Announced for Auction No. 60, Down Payments due August 19, 2005, FCC Forms 601 and 602 due August 19, 2005, Final Payment due September 2, 2005, Ten-Day Petition to Deny Period,” Public Notice, 20 FCC Rcd 13424 (WTB 2005).

¹⁶⁷ *Service Rules for the 698-746, 747-762 and 777-792 MHz Band, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephone, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State, and Local Public Safety Communications Requirements Through the Year 2010, WT Docket Nos. 96-86, 01-309, 03-264, 06-169, PS Docket No. 06-229, Second Report and Order, 22 FCC Rcd 15289 (2007) (700 MHz Second Report and Order).*

¹⁶⁸ *Service Rules for the 698-746, 747-762 and 777-792 MHz Band, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephone, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket No. 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State, and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Second Report and Order, 22 FCC Rcd 15289 (2007) (“700 MHz Second Report and Order”).*

¹⁶⁹ See Auction of 700 MHz Band Licenses Closes, Public Notice, 23 FCC Rcd 4572 (WTB 2008).

¹⁷⁰ See “Auction of 700 MHz Band Licenses Closes, Winning Bidders Announced for Auction 92, Down Payments and FCC Forms 601 and 602 Due August 11, 2011, Final Payments Due August 25, 2011, Ten-Day Petition to Deny Period,” Public Notice, 26 FCC Rcd 10,494 (WTB 2011).

Commission revised its rules regarding Upper 700 MHz band licenses.¹⁷¹ In 2008, the Commission conducted Auction 73 in which C and D block licenses in the Upper 700 MHz band were available.¹⁷² Three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years).

51. **700 MHz Guard Band Licensees.** In the *700 MHz Guard Band Order*, we adopted a small business size standard for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁷³ A “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.¹⁷⁴ Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁷⁵ An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.¹⁷⁶ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.¹⁷⁷

52. **Cellular Radiotelephone Service.** Auction 77 was held to resolve one group of mutually exclusive applications for Cellular Radiotelephone Service licenses for unserved areas in New Mexico.¹⁷⁸ Bidding credits for designated entities were not available in Auction 77.¹⁷⁹ In 2008, the Commission completed the closed auction of one unserved service area in the Cellular Radiotelephone Service, designated as Auction 77. Auction 77 concluded with one provisionally winning bid for the unserved area totaling \$25,002.¹⁸⁰

53. **Private Land Mobile Radio (“PLMR”).** PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee’s primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we use the broad census category, Wireless Telecommunications Carriers (except Satellite). This definition provides that a small

¹⁷¹ 700 MHz Second Report and Order, 22 FCC Rcd 15,289.

¹⁷² See Auction of 700 MHz Band Licenses Closes, *Public Notice*, 23 FCC Rcd 4572 (2008).

¹⁷³ See *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000) (*700 MHz Guard Band Order*).

¹⁷⁴ See *id.* at 5343–45 paras. 106–10.

¹⁷⁵ See *id.*

¹⁷⁶ See *700 MHz Guard Band Auction Closes*, *Public Notice*, 15 FCC Rcd 18026 (2000).

¹⁷⁷ See *700 MHz Guard Band Auction Closes*, *Public Notice*, 16 FCC Rcd 4590 (2001).

¹⁷⁸ See “Closed Auction of Licenses for Cellular Unserved Service Area Scheduled for June 17, 2008, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 77,” *Public Notice*, 23 FCC Rcd 6670 (WTB 2008).

¹⁷⁹ *Id.* at 6685.

¹⁸⁰ See “Auction of Cellular Unserved Service Area License Closes, Winning Bidder Announced for Auction 77, Down Payment due July 2, 2008, Final Payment due July 17, 2008,” *Public Notice*, 23 FCC Rcd 9501 (WTB 2008).

entity is any such entity employing no more than 1,500 persons.¹⁸¹ The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. We note that PLMR licensees generally use the licensed facilities in support of other business activities, and therefore, it would also be helpful to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.¹⁸²

54. As of March 2010, there were 424,162 PLMR licensees operating 921,909 transmitters in the PLMR bands below 512 MHz. We note that any entity engaged in a commercial activity is eligible to hold a PLMR license, and that any revised rules in this context could therefore potentially impact small entities covering a great variety of industries.

55. **Rural Radiotelephone Service.** The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.¹⁸³ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System ("BETRS").¹⁸⁴ In the present context, we will use the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.¹⁸⁵ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies proposed herein.

56. **Air-Ground Radiotelephone Service.** The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.¹⁸⁶ We will use SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.¹⁸⁷ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard and may be affected by rules adopted pursuant to the FNPRM.

57. **Aviation and Marine Radio Services.** Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.¹⁸⁸ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an

¹⁸¹ See 13 C.F.R. § 121.201, NAICS code 517210.

¹⁸² See generally 13 C.F.R. § 121.201.

¹⁸³ The service is defined in 47 C.F.R. § 22.99.

¹⁸⁴ BETRS is defined in 47 C.F.R. §§ 22.757 and 22.759.

¹⁸⁵ 13 C.F.R. § 121.201, NAICS code 517210.

¹⁸⁶ See 47 C.F.R. § 22.99.

¹⁸⁷ See 13 C.F.R. § 121.201, NAICS code 517210.

¹⁸⁸ See 13 C.F.R. § 121.201, NAICS code 517210.

auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars.¹⁸⁹ In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.¹⁹⁰ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as “small” businesses under the above special small business size standards and may be affected by rules adopted pursuant to the FNPRM.

58. **Fixed Microwave Services.** Fixed microwave services include common carrier,¹⁹¹ private operational-fixed,¹⁹² and broadcast auxiliary radio services.¹⁹³ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.¹⁹⁴ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA’s small business size standard. Consequently, the Commission estimates that there are up to 22,015 common carrier fixed licensees and up to 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

59. **Offshore Radiotelephone Service.** This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.¹⁹⁵ There are approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA’s small business size standard for

¹⁸⁹ See generally *Amendment of the Commission’s Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853, 19884–88 paras. 64–73 (1998).

¹⁹⁰ See *id.*

¹⁹¹ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission’s Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

¹⁹² Persons eligible under parts 80 and 90 of the Commission’s Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee’s commercial, industrial, or safety operations.

¹⁹³ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s Rules. See 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

¹⁹⁴ See 13 C.F.R. § 121.201, NAICS code 517210.

¹⁹⁵ This service is governed by Subpart I of Part 22 of the Commission’s Rules. See 47 C.F.R. §§ 22.1001–1037.

Cellular and Other Wireless Telecommunications services.¹⁹⁶ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.¹⁹⁷

60. **39 GHz Service.** The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.¹⁹⁸ An additional size standard for “very small business” is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹⁹⁹ The SBA has approved these small business size standards.²⁰⁰ The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by rules adopted pursuant to the FNPRM.

61. **Local Multipoint Distribution Service.** Local Multipoint Distribution Service (“LMDS”) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.²⁰¹ The auction of the 986 LMDS licenses began and closed in 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.²⁰² An additional small business size standard for “very small business” was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.²⁰³ The SBA has approved these small business size standards in the context of LMDS auctions.²⁰⁴ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. In 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small businesses winning that won 119 licenses.

62. **218-219 MHz Service.** The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year

¹⁹⁶ See 13 C.F.R. § 121.201, NAICS code 517212 (This category will be changed for purposes of the 2007 Census to “Wireless Telecommunications Carriers (except Satellite),” NAICS code 517210.).

¹⁹⁷ See *id.*

¹⁹⁸ See *Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, PP Docket No. 93-253, Report and Order, 12 FCC Rcd 18600, 18661–64, paras. 149–151 (1997).

¹⁹⁹ See *id.*

²⁰⁰ See Letter to Kathleen O’Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

²⁰¹ See *Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, CC Docket No. 92-297, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making, 12 FCC Rcd 12545, 12689-90, para. 348 (1997) (“LMDS Second Report and Order”).

²⁰² See *LMDS Second Report and Order*, 12 FCC Rcd at 12689-90, ¶ 348.

²⁰³ See *id.*

²⁰⁴ See *Alvarez to Phythyon Letter 1998*.

for the previous two years.²⁰⁵ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for a “small business” as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.²⁰⁶ A “very small business” is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.²⁰⁷ These size standards will be used in future auctions of 218-219 MHz spectrum.

63. **2.3 GHz Wireless Communications Services.** This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined “small business” for the wireless communications services (“WCS”) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million for each of the three preceding years.²⁰⁸ The SBA has approved these definitions.²⁰⁹ The Commission auctioned geographic area licenses in the WCS service. In the auction, which was conducted in 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity.

64. **1670-1675 MHz Band.** An auction for one license in the 1670-1675 MHz band was conducted in 2003. The Commission defined a “small business” as an entity with attributable average annual gross revenues of not more than \$40 million for the preceding three years and thus would be eligible for a 15 percent discount on its winning bid for the 1670-1675 MHz band license. Further, the Commission defined a “very small business” as an entity with attributable average annual gross revenues of not more than \$15 million for the preceding three years and thus would be eligible to receive a 25 percent discount on its winning bid for the 1670-1675 MHz band license. One license was awarded. The winning bidder was not a small entity.

65. **3650-3700 MHz band.** In March 2005, the Commission released a *Report and Order and Memorandum Opinion and Order* that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (*i.e.*, 3650-3700 MHz).²¹⁰ As of April 2010, more than 1270 licenses have been granted and more than 7433 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650-3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

66. **24 GHz – Incumbent Licensees.** This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of “Cellular and Other

²⁰⁵ See generally *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330 (1994).

²⁰⁶ See generally *Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (1999) (*218-219 MHz Report and Order and Memorandum Opinion and Order*).

²⁰⁷ See *id.*

²⁰⁸ *Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS)*, GN Docket No. 96-228, Report and Order, 12 FCC Rcd 10785, 10879 para. 194 (1997).

²⁰⁹ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (Dec. 2, 1998) (*Alvarez Letter 1998*).

²¹⁰ The service is defined in section 90.1301 *et seq.* of the Commission’s Rules, 47 C.F.R. § 90.1301 *et seq.*

Wireless Telecommunications” companies. This category provides that such a company is small if it employs no more than 1,500 persons.²¹¹ We believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent²¹² and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

67. **24 GHz – Future Licensees.** With respect to new applicants in the 24 GHz band, the size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.²¹³ “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.²¹⁴ The SBA has approved these small business size standards.²¹⁵ These size standards will apply to a future 24 GHz license auction, if held.

68. **Satellite Telecommunications.** Since 2007, the SBA has recognized satellite firms within this revised category, with a small business size standard of \$15 million.²¹⁶ The most current Census Bureau data are from the economic census of 2007, and we will use those figures to gauge the prevalence of small businesses in this category. Those size standards are for the two census categories of “Satellite Telecommunications” and “Other Telecommunications.” Under the “Satellite Telecommunications” category, a business is considered small if it had \$15 million or less in average annual receipts.²¹⁷ Under the “Other Telecommunications” category, a business is considered small if it had \$25 million or less in average annual receipts.²¹⁸

69. The first category of Satellite Telecommunications “comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”²¹⁹ For this category, Census Bureau data for 2007 show that there were a total of 512 firms that operated for the entire year.²²⁰ Of this total, 464 firms had annual receipts of under \$10 million, and 18 firms had receipts of \$10 million to

²¹¹ See 13 C.F.R. § 121.201, NAICS code 517210.

²¹² Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

²¹³ See *Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 para. 77 (2000); see also 47 C.F.R. § 101.538(a)(2).

²¹⁴ See *Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 para. 77 (2000); see also 47 C.F.R. § 101.538(a)(1).

²¹⁵ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

²¹⁶ See 13 C.F.R. § 121.201, NAICS code 517410.

²¹⁷ *Id.*

²¹⁸ See 13 C.F.R. § 121.201, NAICS code 517919.

²¹⁹ U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications”.

²²⁰ See 13 C.F.R. § 121.201, NAICS code 517410.

\$24,999,999.²²¹ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by rules adopted pursuant to the FNPRM.

70. The second category of Other Telecommunications “primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.”²²² For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year.²²³ Of this total, 2,346 firms had annual receipts of under \$25 million.²²⁴ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

71. **Cable and Other Program Distribution.** Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”²²⁵ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.²²⁶ According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.²²⁷ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more.²²⁸ Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the FNPRM.

72. **Cable Companies and Systems.** The Commission has developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission’s rules, a “small cable company” is one serving 400,000 or fewer subscribers, nationwide.²²⁹ Industry data indicate that, of

²²¹ See *id.* An additional 38 firms had annual receipts of \$25 million or more.

²²² U.S. Census Bureau, 2007 NAICS Definitions, “517919 Other Telecommunications”, <http://www.census.gov/naics/2007/def/ND517919.HTM>.

²²³ See 13 C.F.R. § 121.201, NAICS code 517919.

²²⁴ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517919” (issued Nov. 2010).

²²⁵ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition), <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

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²²⁷ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

²²⁸ See *id.*

²²⁹ See 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. See *Implementation of Sections of the 1992 Cable Television Consumer Protection and Competition Act: Rate Regulation*, MM Docket Nos. 92-266, 93-215, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 para. 28 (1995).

1,076 cable operators nationwide, all but eleven are small under this size standard.²³⁰ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.²³¹ Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers.²³² Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the FNPRM.

73. **Cable System Operators.** The Act also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."²³³ The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.²³⁴ Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.²³⁵ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million,²³⁶ and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

74. **Open Video Services.** The open video system ("OVS") framework was established in 1996, and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers.²³⁷ The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,²³⁸ OVS falls within the SBA small business size standard covering cable services, which is "Wired Telecommunications Carriers."²³⁹ The SBA has developed a small business size standard for this

²³⁰ These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

²³¹ See 47 C.F.R. § 76.901(c).

²³² WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

²³³ 47 U.S.C. § 543(m)(2); see also 47 C.F.R. § 76.901(f) & nn.1-3.

²³⁴ 47 C.F.R. § 76.901(f); see *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (Cable Services Bureau 2001).

²³⁵ These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

²³⁶ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission's rules.

²³⁷ 47 U.S.C. § 571(a)(3)-(4). See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 06-189, Thirteenth Annual Report, 24 FCC Rcd 542, 606 para. 135 (2009) ("*Thirteenth Annual Cable Competition Report*").

²³⁸ See 47 U.S.C. § 573.

²³⁹ U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers"; <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.²⁴⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more.²⁴¹ Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the Notice. In addition, we note that the Commission has certified some OVS operators, with some now providing service.²⁴² Broadband service providers (“BSPs”) are currently the only significant holders of OVS certifications or local OVS franchises.²⁴³ The Commission does not have financial or employment information regarding the entities authorized to provide OVS, some of which may not yet be operational. Thus, again, at least some of the OVS operators may qualify as small entities.

75. **Internet Service Providers.** Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”²⁴⁴ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.²⁴⁵ According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year.²⁴⁶ Of this total, 3,144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.²⁴⁷ Thus, under this size standard, the majority of firms can be considered small. In addition, according to Census Bureau data for 2007, there were a total of 396 firms in the category Internet Service Providers (broadband) that operated for the entire year.²⁴⁸ Of this total, 394 firms had employment of 999 or fewer employees, and two firms had employment of 1000 employees or more.²⁴⁹ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the FNPRM.

76. **Internet Publishing and Broadcasting and Web Search Portals.** Our action may pertain to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar

²⁴⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

²⁴¹ See *id.*

²⁴² A list of OVS certifications may be found at <http://www.fcc.gov/mb/ovs/csovsr.html>.

²⁴³ See *Thirteenth Annual Cable Competition Report*, 24 FCC Rcd at 606-07 para. 135. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

²⁴⁴ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition), <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

²⁴⁵ 13 C.F.R. § 121.201, NAICS code 517110.

²⁴⁶ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517110” (issued Nov. 2010).

²⁴⁷ See *id.*

²⁴⁸ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171103 (issued Nov. 2010).

²⁴⁹ See *id.*

IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that “primarily engaged in 1) publishing and/or broadcasting content on the Internet exclusively or 2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals).”²⁵⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 500 or fewer employees.²⁵¹ According to Census Bureau data for 2007, there were 2,705 firms in this category that operated for the entire year.²⁵² Of this total, 2,682 firms had employment of 499 or fewer employees, and 23 firms had employment of 500 employees or more.²⁵³ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the FNPRM.

77. **Data Processing, Hosting, and Related Services.** Entities in this category “primarily ... provid[e] infrastructure for hosting or data processing services.”²⁵⁴ The SBA has developed a small business size standard for this category; that size standard is \$25 million or less in average annual receipts.²⁵⁵ According to Census Bureau data for 2007, there were 8,060 firms in this category that operated for the entire year.²⁵⁶ Of these, 7,744 had annual receipts of under \$24,999,999.²⁵⁷ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the FNPRM.

78. **All Other Information Services.** The Census Bureau defines this industry as including “establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals).”²⁵⁸ Our action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is \$7.0 million or less in average annual receipts.²⁵⁹ According to Census Bureau data for 2007, there were 367 firms in this category that operated for the entire year.²⁶⁰ Of these, 334 had annual receipts of under \$5.0 million, and an additional 11 firms had receipts of between \$5 million and \$9,999,999.

²⁵⁰ U.S. Census Bureau, “2007 NAICS Definitions: 519130 Internet Publishing and Broadcasting and Web Search Portals,” <http://www.naics.com/censusfiles/ND519130.HTM>.

²⁵¹ See 13 C.F.R. § 121.201, NAICS code 519130.

²⁵² U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 519130” (issued Nov. 2010).

²⁵³ *Id.*

²⁵⁴ U.S. Census Bureau, “2007 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services”, <http://www.census.gov/naics/2007/def/NDEF518.HTM>.

²⁵⁵ See 13 C.F.R. § 121.201, NAICS code 518210.

²⁵⁶ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, “Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 518210” (issued Nov. 2010).

²⁵⁷ *Id.*

²⁵⁸ U.S. Census Bureau, “2007 NAICS Definitions: 519190 All Other Information Services”, <http://www.census.gov/naics/2007/def/ND519190.HTM>.

²⁵⁹ See 13 C.F.R. § 121.201, NAICS code 519190.

²⁶⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, “Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 519190” (issued Nov. 2010).

Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

79. In this FNPRM, the Commission seeks public comment on additional steps to complete its comprehensive universal service and intercarrier compensation reform. The transition to complete the reform of the universal service programs and new intercarrier compensation rules could affect all carriers, including small entities, and may include new administrative processes. In proposing these reforms, the Commission seeks comment on various reporting, recordkeeping, and other compliance requirements that may apply to all carriers, including small entities. We seek comment on any costs and burdens on small entities associated with the proposed rule, including data quantifying the extent of those costs or burdens.

1. Universal Service

80. In the Order, the Commission adopts a rule requiring that actual speed and latency be measured on each ETCs access network from the end-user interface to the nearest Internet access point, as well as a rule that requires ETCs to certify to and report the results to USAC on an annual basis. In this FNPRM, the Commission seeks comment on whether the Commission should adopt a specific measurement methodology beyond what is described in the Order and the format in which ETCs should report their results. Specifically, the Commission seeks comment on whether we should specify a uniform reporting format, such as a format that can be produced to the Universal Service Administrative Company ("USAC") and auditable such that USAC or the state commissions may confirm that a provider is, in fact, providing broadband at the required minimum speeds. The Commission also seeks comment on whether providers should be required to provide the underlying raw measurement data to USAC and, if so, whether there are legitimate concerns with the confidentiality of such data. In the alternative, the Commission seeks comment on whether it would be sufficient to have a provider certify to USAC that its network is satisfying the minimum broadband metrics and retain the results of its own performance measurement to be produced on request in the course of possible future audits.

81. In the Order, the Commission also directs the Wireline Competition Bureau and Wireless Telecommunications Bureau to develop and conduct a survey of voice and broadband rates in order to compare urban and rural voice and broadband rates. In this FNPRM, the Commission seeks comment on the components of the survey.

82. In this FNPRM, we seek comment on the Rural Association's proposed creation of a new broadband-focused CAF mechanism that ultimately would entirely replace existing support mechanisms for rate-of-return carriers. We seek comment on what information we would need to require from carriers in order to evaluate and implement this proposal.

83. Under the Order, rate-of-return carriers will continue to receive for some time a modified version of their legacy universal service support. In this FNPRM, we seek comment on the appropriate data and methodologies the Commission should use to calculate the weighted average cost of capital used to identify the rate-of-return required to maintain the current value of a firm.

84. The Commission proposes to apply to recipients of Mobility Fund Phase II support, CAF support, and Remote Areas Fund support the same rules for accountability and oversight. Thus recipients of USF support through any of these funding mechanisms would be required to meet the same reporting, audit, and record retention requirements. Because of differences between Mobility Fund support and other USF high cost support mechanisms, the Commission proposes that Mobility Fund Phase II support recipients include the same additional information in their annual reports as Mobility Fund Phase I support recipients. This information includes maps with service area and population information, linear road mile coverage, and drive test data, as well as updated project information. To minimize waste, fraud,

and abuse, the Commission proposes to require individuals who are eligible for CAF support for remote areas to certify that they are eligible and periodically verify their continued eligibility.

85. Where the Commission uses competitive bidding to award Mobility Fund II support, support in areas where the price cap ETC declines to make a state-level commitment, or support for remote areas, the Commission proposes to use a two-stage application process, including ownership disclosure requirements, similar to that used in spectrum auctions and adopted for Mobility Fund Phase I.

86. The Commission also seeks comment in the FNPRM on whether there are specific requirements in the existing annual reporting rule for ETCs that should be modified to reflect basic differences in the nature and purpose of the support provided for mobile services. The Commission further seeks comment on any other aspects of its annual reporting requirements that should be modified to better reflect the nature of mobile services being offered and the objectives of the USF support provided for them.

2. Intercarrier Compensation

87. In the FNPRM, the Commission seeks comment and data on issues that must be addressed to complete its comprehensive reform of the intercarrier compensation system. These issues include the appropriate path or transition to modernize the existing rules as needed to bring all intercarrier compensation to the ultimate end point of bill-and-keep, if and how carriers should be allowed to recover revenues that might be reduced by any additional intercarrier compensation reforms, and data to analyze the effects of proposed reforms and need for revenue recovery.

88. Compliance with a transition to a new system for all intercarrier compensation may impact some small entities and may include new or reduced administrative processes. For carriers that may be affected, obligations may include certain reporting and recordkeeping requirements to determine and establish their eligibility to receive recovery from other sources as intercarrier compensation rates are reduced. Additionally, these carriers may need to modify some administrative processes relating to the billing and collection of intercarrier compensation to comply with any new or revised rules the Commission adopts as a result of the FNPRM.

89. Modifications to the rules to address potential arbitrage opportunities or additional call signaling rules for VoIP traffic also will affect certain carriers, potentially including small entities. To the extent that the Commission further modifies the rules adopted in the Order as a result of the FNPRM, providers might be required to modify or adopt administrative, recordkeeping, or other processes to implement those changes. Moreover, the FNPRM considers possible rule modifications to require IP-to-IP interconnection, which may require service providers to modify some administrative processes. Further, possible rule modifications to address potential arbitrage, if adopted, may affect certain carriers. For example, carriers that engage in such arbitrage may be subject to revised tariff filing or other requirements. However, these impacts are mitigated by the certainty and reduced litigation that should occur as a result of the reforms adopted, including arbitrage loopholes that the Commission has closed in the Order.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

90. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of

the rule, or any part thereof, for such small entities.”²⁶¹

91. The FNPRM seeks comment from all interested parties. The Commission is aware that some of the proposals under consideration may impact small entities. Small entities are encouraged to bring to the Commission’s attention any specific concerns they may have with the proposals outlined in the FNPRM.

92. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the FNPRM, in reaching its final conclusions and taking action in this proceeding. The reporting, recordkeeping, and other compliance requirements in the FNPRM could have an impact on both small and large entities. The Commission believes that any impact of such requirements is outweighed by the accompanying public benefits. Further, these requirements are necessary to ensure that the statutory goals of Section 254 of the Act are met without waste, fraud, or abuse.

93. In the FNPRM, the Commission seeks comment on several issues and measures that may apply to small entities in a unique fashion. Specifically, the FNPRM seeks comment on whether small businesses should be eligible for a bidding preference if competitive bidding is used to provide Mobility Fund Phase II support, support in areas where the price cap ETC declines to make a state-level commitment, or support for remote areas. Entities seeking the small business bidding preference would be required to provide information about their gross revenues. The Commission believes that the benefits to small businesses of a bidding preference, if adopted, would significantly outweigh the burden of any additional information disclosure requirements. In addition, the Commission seeks comment on the data it will need to complete its represcription of the authorized interstate rate of return. Although data is requested from the industry generally, small carriers may be differently affected by the ultimate prescription of a new rate of return.

94. The FNPRM seeks comment on several issues relating to bill-and-keep implementation, including how points of interconnection obligations will function for rural and non-incumbent LECs,²⁶² definition of the network edge,²⁶³ and the future role of tariffs and interconnection agreements.²⁶⁴ The Commission also seeks comment on the appropriate sequence and timing of intercarrier rate reductions for those rate elements not covered by its Order adopting of bill-and-keep as the ultimate end-point for reform, particularly for originating switched access, dedicated transport, tandem switching and tandem transport in some circumstances.²⁶⁵ The Commission seeks comment on the potential impact to small entities of reduced intercarrier rates for these additional rate elements, including whether a different transition period might be appropriate for particular classes of carriers.

95. The FNPRM also seeks comment on how recovery of reduced intercarrier compensation revenues in the future would impact carriers, and how recovery, if any, for those reduced revenues should be addressed.²⁶⁶ The Commission asks if the recovery approach adopted should be different depending on the type of carrier or regulation.²⁶⁷ The Commission also invites comment on specific recovery considerations for rate-of-return carriers and whether any cost or revenue recovery mechanism could

²⁶¹ 5 U.S.C. § 603(c)(1)–(c)(4).

²⁶² See *supra* para. 1317.

²⁶³ See *supra* paras. 1320-1321.

²⁶⁴ See *supra* paras. 1312-1314.

²⁶⁵ See *supra* Section XVII.M.

²⁶⁶ See *supra* para. 1326.

²⁶⁷ See *supra* Section XVII.N.

provide rate-of-return carriers with greater incentives for efficient operation.²⁶⁸

96. Finally, the Commission seeks comment on whether separate consideration for small entities is necessary or appropriate for each of the following issues discussed in the FNPRM: the potential impact of additional call signaling rules governing VoIP traffic;²⁶⁹ the potential impact of rules relating to potential future arbitrage, including revised tariff-filing requirements;²⁷⁰ and the potential impact of rules relating to IP-to-IP interconnection and related issues.²⁷¹ Specifically with regard to the IP-to-IP interconnection, the FNPRM seeks comment on the scope of traffic exchange that should be included, responsibility for costs of IP-to-TDM conversions, and the statutory framework and appropriate scope of any IP-to-IP interconnection obligation.²⁷²

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

97. None.

²⁶⁸ See *supra* Section XVII.P.

²⁶⁹ See *supra* Section XVII.Q.

²⁷⁰ See *supra* para. 1325.

²⁷¹ See *supra* Section XVII.P.4

²⁷² *Id.*

**STATEMENT OF
CHAIRMAN JULIUS GENACHOWSKI**

Re: *Connect America Fund*, WC Docket No. 10-90; *A National Broadband Plan for Our Future*, GN Docket No. 09-51; *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Docket No. 07-135; *High-Cost Universal Service Support*, WC Docket No. 05-337; *Developing an Unified Intercarrier Compensation Regime*, CC Docket No. 01-92; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45; *Lifeline and Link-Up*, WC Docket No. 03-109; *Mobility Fund*, WT Docket No. 10-208

Today, we take a momentous step in our efforts to harness the benefits of broadband Internet for every American.

I am tremendously grateful to each of my colleagues for working hard and working together to get us here.

This is a once-in-a-generation overhaul of universal service, keeping faith with the nation's long commitment to connecting all Americans to communications services.

We are taking a system designed for the Alexander Graham Bell era of rotary telephones and modernizing it for the era of Steve Jobs and the Internet future he imagined.

We are reaffirming for the digital age the fundamental American promise of opportunity for all.

We are furthering our national goal of connecting the country to wired and wireless broadband.

And we are helping put America on its proper 21st century footing, positioning us to lead the world in a fiercely competitive global digital economy.

Infrastructure has always been a key pillar of American economic success, with telephone and other infrastructure connecting consumers and businesses, facilitating commerce, and unleashing innovation. Broadband is the indispensable infrastructure of our 21st century economy.

Recognizing this fact, for years, respected voices have called universal broadband an essential ingredient for American economic competitiveness and job creation. In its 2007 report *Rising Above the Gathering Storm*, the National Academy of Sciences said that "[a]ccelerating progress toward making broadband connectivity available and affordable for all is critical" and urged government to "take the necessary steps to meet that goal." Our National Broadband Plan correctly called extending wired and wireless broadband to all Americans the "great infrastructure challenge of the 21st century." And last year, IBM CEO Sam Palmisano expressed a view from CEOs, governors, mayors, and consumers. He implored policymakers to "fix the bridges, but don't forget broadband," and said that "a pervasive broadband infrastructure would be a powerful generator of new jobs and economic growth."

Today, building on years of hard work by the FCC and on Capitol Hill, this Commission is acting unanimously – and on a bipartisan basis – to meet this critical national challenge, and bring the Universal Service Fund and intercarrier compensation system into the broadband age.

Our action will enable millions more Americans to work, learn and innovate online. It will open new vistas of digital opportunity, and enhance public safety. It will create jobs in the near term, and lay

the foundation for enduring job creation, economic growth, and U.S. global competitiveness for years to come.

Today's reforms of the multi-billion dollar Universal Service Fund will bring real benefits to consumers and communities in every part of the country.

Over the next year, the Connect America Fund will bring broadband to more than 600,000 Americans who wouldn't have it otherwise. Over the following five years, millions more rural families will be connected. And today's Order puts us on the path to get broadband to every American by the end of the decade – to close the broadband deployment gap which now stands at close to twenty million Americans.

We are also extending the benefits of mobile broadband coverage to tens of thousands of unserved road-miles, areas where millions of Americans work, live, and travel. These are areas of frustration and economic stagnation for so many people – where mobile connections are needed but unavailable, where small businesses lose out on customers and productivity, and where people in traffic accidents can't reach 9-1-1.

Today, we make mobility an independent universal service objective for the first time, providing dedicated support through the world's first Mobility Fund. Over the next three years, we will provide almost \$1 billion in funding per year for universal mobility.

Mobile is one of the fastest-growing and most promising sectors of our economy, and having the world's largest market for 3G and 4G subscribers will be a key competitive advantage enabling us to lead the world in mobile innovation.

New wired and wireless broadband will be a lifeline for rural communities currently being bypassed by the Internet revolution. Young people who didn't see a future in their small hometowns will now be able to access a new world of opportunity. Entrepreneurs in small towns won't need to move to the big city to live their dreams; instead, small business owners doing everything from selling beef to starting hunting lodges – like residents I met in Nebraska wanted to do – will be able to reach customers in the next town, city, state or country, and boost their efficiency and productivity through cloud-based services.

Today's action will empower small businesses that otherwise couldn't exist in small-town America, and create new jobs in those communities.

This includes farmers, who need broadband to access commodity pricing, crop information, real-time weather reports, and online auctions. During our process, we heard this directly from farmers in rural America.

Today's action will help connect anchor institutions, which can play a vital role – for example, in expanding basic digital literacy training – in a world where broadband skills are necessary to find and land jobs.

Today's action has the potential to be one of the biggest job creators in rural America in decades. We estimate that the Order as a whole will unleash billions in private sector broadband infrastructure spending in rural America over the next decade, creating hundreds of thousands of jobs. And by empowering millions more Americans to engage in e-commerce – as buyers and sellers – the Order will grow the size of our overall online marketplace and provide a boost for Main Street businesses across the country.

Today's action will change the landscape for students who are now unserved by broadband – providing educational opportunity that would otherwise be denied.

In now-unserved areas, it will change the landscape for seniors and people with illnesses – providing remote diagnostics and treatment to people who would otherwise have no access or would have to travel for hundreds of miles to get care.

And it will enable parents in now-unserved areas to finally connect with their children in military service overseas through video chat or other modern communications means that require broadband.

By constraining the growth of existing programs, today's reforms will also minimize the burden those programs place on all consumers, keeping hundreds of millions of dollars in consumers' pockets over the next several years. Our overhaul of the intercarrier compensation system will gradually eliminate the billions of dollars in hidden subsidies currently paid by consumers across the country through their wireless and long distance phone bills. Our staff estimates that the consumer benefits of ICC reform will be more than \$2 billion annually. Consumers will get more value for their money and less waste.

These material benefits flow directly from the policy principles and structural reforms that we've embraced in this Order.

The reforms implement the idea that government programs should be modernized to focus on the strategic challenges of today and tomorrow, not yesterday. Starting today, USF will be transformed into the Connect America Fund, which will directly take on our country's 21st century infrastructure challenge by enabling the private sector to build robust, scalable, affordable broadband to homes, businesses, and anchor institutions in unserved communities.

Our ICC reforms will also advance the deployment of modern Internet Protocol networks. And as the telephone network transitions to an IP network, the Order affirms our expectation that carriers will negotiate in good faith on IP-to-IP interconnection for voice traffic.

Today's Order also recognizes the growing importance of mobile broadband. As I mentioned, today for the first time we make mobility an independent universal service objective, and take significant concrete steps to meet that objective.

Also a first, today's Order brings market-based competitive bidding into universal service support. In a series of ways, including auctions, we have structured distribution of public funds to ensure real efficiency and accountability in the Connect America Fund.

For the first time, our Order puts the Fund on a firm budget. Fiscal responsibility was a principle we announced on Day One, and we've adhered to that in this Order, protecting the interests of the millions of consumers who contribute into the Fund. And we put in place a series of reforms to eliminate duplicative funding and other funding where it's not needed and can't be justified. We also end arbitrage schemes that take advantage of gaps, closing loopholes in our rules.

Faced with many complex and nuanced policy questions, I believe this Commission has reached the right solutions because we've approached these issues the right way.

We did not rubber stamp or adopt wholesale the proposals of any stakeholder or group of stakeholders. Instead, we made our decisions on what's right for the American people and our economy based on facts and data gathered in one of the most extensive records in FCC history, including hearings

and workshops across the country, and more than 2,700 substantive comments totaling tens of thousands of pages.

We have focused on putting consumers first, calibrating the policies we adopt to maximize consumer benefit. We have been careful to ensure that affected companies have predictable and measured transition paths so they can keep investing in their networks to better serve consumers and support our economy. And we have brought increased clarity to areas of uncertainty created by tensions between new communications services, like VoIP, and old rules.

Getting to this point wasn't easy. It required us to make some tough choices about what the Connect America Fund – and consumers – could and could not support.

Some proposals would have required consumers to pay a greater share of the costs of reform, or increased the size of the Fund. That would have put too much of a burden on consumers during these difficult economic times.

Some said that we should dramatically reduce the size of the Fund – but that would have left behind the millions of Americans being bypassed by broadband and with no prospect of broadband connectivity.

Some would have had us operate as if we were writing on a blank slate – but that would have risked needless consumer disruption, build-out delays, and other unintended and undesirable consequences.

Getting to this point not only required tough choices, it required the engagement of many stakeholders around the country, of our partners in the federal government, the states, Tribal communities, the private sector, and the non-profit and consumer advocacy community. I appreciate the broad level of constructive engagement. That very much includes the many members of Congress, on both sides of the aisle, who have worked for years to reform and improve universal service, and whose ongoing and constructive input is reflected in our action today. There are too many to thank individually, but I am grateful to all of the members of Congress who provided input and guidance.

The President has been a consistent leader on broadband and the opportunities of technology, and our actions today help meet national goals of universal access to wired and wireless broadband.

I also want to thank our state partners, who pioneered many of the reforms we adopt today. Moving forward, I am pleased that the states will continue to play a vital role, including a role in ensuring that consumers are well served by our universal service program.

I'm deeply grateful to my fellow Commissioners, who have worked tremendously hard to make today possible. Commissioners Copps and McDowell have been fighting to fix these programs for years, and Commissioner Clyburn's strong experience at the state level in South Carolina has been invaluable in our efforts. From top to bottom, today's Order reflects the seriousness of purpose and thoughtful input of each of my colleagues on the Commission. It is a better Order as a result, and I thank each of you.

At a time when citizens want solutions, not gridlock, I'm proud that this Commission is approving bipartisan reform of a broken system, reform that will deliver massive benefits for the American people.

This would not have happened without the tremendous work of the staff, without whom we would not have been able to finally accomplish a goal that's been elusive for many years: making reform

a reality. Our staff has not only worked hard, they have performed brilliantly – crunching numbers, mastering complex technologies, and operating at a world-class policy level. Today's Order is the product of that tremendous effort. I particularly want to thank the leadership team that managed this process: Sharon Gillett, Ruth Milkman, Carol Matthey, Rebekah Goodheart, Jim Schlichting, Michael Steffen, and many others in our Wireline and Wireless Bureaus, our General Counsel's office, and throughout the agency. I also want to acknowledge the work of the team that developed our National Broadband Plan for laying the groundwork for these reforms. And I want to particularly salute and applaud Zac Katz in my office, the quarterback of our USF and ICC modernization effort. Without your leadership, persistence, and savvy, these reforms simply could not have happened.

Of course, our work is not yet done. We have implementation work ahead, and there will continue to be intensive engagement with all stakeholders in response to the Further Notice of Proposed Rulemaking we adopt today, and in the months to come.

And we still face a tremendous challenge in increasing broadband adoption, an ongoing barrier to opportunity in both rural and urban areas. While there's no silver bullet, the Lifeline portion of USF is part of the solution – including a significant investment in broadband adoption pilot programs. I've asked the staff to gear up Lifeline reform for action this year.

But wait, there's more. As my colleagues have also noted, there's work to do on the contribution side. That's another important USF topic the Commission will address.

I'll leave you with a closing thought. In the 1930s and 1950s, when Presidents Roosevelt and Eisenhower directed federal funding to roads, tunnels, bridges, and the national highway system, they were investing in then-current technologies to connect our people and our communities. The same was true for electricity and telephone service, also key 20th century universal service achievements. These investments have paid tremendous dividends for our economy and our country.

Broadband Internet truly is the information superhighway – the key connective infrastructure of the 21st century. It's what will drive our competitiveness, our economy, and broad opportunity for decades to come.

Our action today is firmly rooted in sound principles that have served our country well in the past, and I'm confident it will help deliver a bright future for all Americans.

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